

DESCRIPTIONS OF SOME NEW SPECIES OF PHYTOPHAGOUS
COLEOPTERA.

BY MARTIN JACOBY, F.E.S.

SAGRA PAPUANA, *n. sp.*

Metallic cupreous or blue; the last four joints of the antennæ black; thorax subquadrate, scarcely visibly punctured; elytra narrowed posteriorly, the basal portion raised, obsoletely geminate punctate-striate, the interstices transversely wrinkled at the sides, cupreous, a spot near the sides greenish.

Mas: posterior femora scarcely extending beyond the apex of the elytra, strongly widened at the middle, armed with a larger and a smaller tooth placed below near the apex; posterior tibiæ stout, curved, thickly tomentose on their inner surface, with a single stout triangular tooth below the middle, intermediate femora curved at the base; first abdominal segment clothed with fulvous pubescence.

Fem.: posterior femora with a short acute ridge near the apex, their tibiæ strongly curved, unarmed and without pubescence; the first abdominal segment smooth, not pubescent. Length, 6—8 lines.

Hab.: New Guinea, Port Moresby (collection, Jacoby).

The male of this *Sagra* may be known from most of its allies by the thickly tomentose inner side of the posterior tibiæ and their single stout tooth, also by the comparatively short posterior femora; the thorax is nearly square, the anterior angles are not prominent but rather obtuse, bounded by a short but deep groove within, the surface is either almost entirely impunctate or impressed with very few minute punctures; at the middle of the base a short longitudinal groove is placed; the elytra have prominent shoulders, bounded by a short longitudinal groove, their punctuation consists of double and rather irregular rows, of which the pair within the humerus is more distinct and oblique in direction, the interstices near the sides and apex, and to a less extent on the disc, are transversely wrinkled; the colour varies from metallic cupreous to green or entirely blue; in the cupreous coloured specimens there is a small green patch of more or less intensity, placed on the sides of each elytron.

MEGALOPUS BUCKLEYI, *n. sp.*

Elongate, strongly narrowed posteriorly, black, the sides of the thorax, parts of the breast and abdomen, fulvous; elytra closely punctured and rugose, a narrow angulate band before, another behind the middle and the apex (with the exception of a black spot), fulvous.

Mas: the posterior femora very large and robust, black above, fulvous below, armed with a small and a very large tooth, their tibiæ very strongly curved. Length, 7 lines.

Fem.: the elytral bands yellowish-white; the legs feeble and entirely black. Length, 5 lines.

Hab.: Ecuador.

This species, which was obtained by Mr. Buckley some years ago, and of which I expressed an opinion at the time (P. Z. S., 1880, p. 591) that it might possibly represent a new species, closely allied to *M. armatus*, Lac., must, I think, be considered as such, as a closer examination has proved to me. *M. Buckleyi* differs from *M. armatus* in the following details:—the elytra, instead of being black with a narrow *central* fulvous band; have two fasciæ, one before the other behind the middle, thus resembling the pattern of the female; the apex of the elytra, which in *M. armatus* is black, with a small fulvous spot and finely sericeous, is smooth and fulvous with a black central spot in *M. Buckleyi*; the female of the present species differs also from that of *M. armatus* in having the thorax coloured exactly like the male, that is, black with a flavous lateral margin; the colour of the under-side (flavous, with the sides of the breast and the middle of the abdominal segments black) agrees with that of the allied species. I have, however, never seen a specimen of *M. armatus* marked as pointed out above, and moreover, the *position* of the elytral bands excludes the supposition that the two insects are identical.

DORYPHORA BRAZILIENSIS, *n. sp.*

Obscure piceous; head and thorax testaceous, the former with three the latter with four black spots; elytra dark violaceous-blue, finely and remotely punctured, the lateral margin narrowly testaceous.

var.: elytra entirely pale fulvous or testaceous. Length, $4\frac{1}{2}$ — $5\frac{1}{2}$ lines.

Of oblong and parallel shape, rather convex, the head remotely punctured, with two spots at the base, two near the antennæ, and a central one, black; thorax nearly three times broader than long, the sides strongly rounded before the middle, the anterior margin deeply emarginate behind the eyes, straight at the middle, the posterior margin broadly produced at the middle, the surface remotely but irregularly punctured, the punctures rather deep and closely placed at the sides; scutellum black; elytra finely and not closely punctured, the punctures arranged in irregular rows, the lateral margin and the epipleuræ testaceous, the disc dark violaceous-blue; below obscure piceous, the legs testaceous, stained with piceous; mesosternal process long and pointed; tarsi black.

Hab.: Brazils, St. Catharina (my collection).

Closely allied to *D. fervida* and *D. cincta*, but differing entirely in the punctuation of the thorax and elytra, and from *D. amabilis*, Baly, in the much larger size and colour of the elytra; the pale variety may possibly be immature, but agrees in every other respect with the type.

DORYPHORA PICEOFASCIATA, *n. sp.*

Testaceous; the terminal joints of the antennæ black; thorax transverse, nearly impunctate; elytra strongly convex, punctate-striate, a sutural broad band and

another discoidal band, narrowed anteriorly and posteriorly, as well as the extreme lateral margin, piceous. Length, $4\frac{1}{2}$ lines.

Head impunctate, testaceous; antennæ rather slender, the basal five joints fulvous, the others black; the three terminal joints distinctly longer than broad; thorax three times broader than long, the sides straight at the base, but slightly rounded in front, the surface, with the exception of a few fine punctures near the base, impunctate, pale fulvous; elytra not widened towards the middle, finely punctate-striate, the striæ placed at irregular distances, flavous, the suture with a piceous longitudinal band, extending to the first two rows of punctures, and strongly narrowed at the base, the discoidal band placed between the fourth and seventh striæ, also narrowed at the base, and ending in an acute point near the apex; the lateral margin narrowly black; under-side and legs testaceous; the mesosternal process moderately long, robust, and slightly curved.

Hab. : — ?

This species, of which I possess a single specimen without locality, resembles in the elytral pattern *D. flavovittata*, Stål, but differs in the shape of the dark bands of the elytra, the space between the first two rows of punctures and the third row is very broad, nearly double the width of that between the first two rows, the following rows of punctures are also placed at unequal distances, but the width of the piceous bands and that of the flavous portion is nearly equal.

DORYPHORA BRUNNEO-LINEATA, *n. sp.*

Obscure testaceous; the terminal joints of the antennæ black; thorax strongly transverse, finely punctured; elytra very strongly geminate, punctate-striate, obscure pale greenish, with four pale longitudinal brownish stripes. Length, $4\frac{1}{2}$ lines.

Head with a few minute punctures; antennæ comparatively slender, extending to the base of the elytra, black, the lower four joints testaceous; thorax three times broader than long, the sides strongly rounded before the middle, the anterior margin straight at the middle, deeply obliquely emarginate behind the eyes, the posterior margin slightly rounded, the surface very finely and irregularly punctured; scutellum impunctate, obscure testaceous; elytra regularly convex, pale greenish-testaceous with eight rows of deep and regular punctures (not counting the short subsutural stripe), arranged in pairs, and another single row of punctures near the lateral margin; these double rows of pale brownish colour, the interstices impunctate, pale greenish; beneath and legs obscure testaceous; the mesosternal process nearly straight, short and robust.

Hab. : Brazils, Santa Catharina.

Closely allied to *D. strigilata*, Stål, but differing in the black terminal joints of the antennæ, the much more transversely shaped and finely punctured thorax, and the deeper punctuation of the elytral striæ; the sides of the thorax in *D. brunneo-lineata* are also more strongly widened and rounded, but the elytral pattern is exactly similar in both species.

DORYPHORA UNDULATO-FASCIATA, *n. sp.*

Broadly ovate, very convex, dark metallic violaceous; the head, antennæ, and thorax black, opaque, finely punctured; elytra flavous, remotely punctured, the sutural and lateral margins, some spots at the base and three undulated transverse bands, before, at, and below the middle, black. Length, 8 lines.

Head finely punctured; antennæ extending to the base of the elytra, black, the lower three joints stained with fulvous below; thorax three times broader than long, the sides broadly rounded, the surface finely and remotely punctured, the interstices also microscopically finely punctate, the sides with a small round fovea, the extreme lateral margin impressed with a row of larger punctures; scutellum black, smooth, impunctate; elytra not wider at the base than the thorax, more strongly punctured than the latter, the interstices finely aciculate here and there, bright yellowish-white, the basal margin with two or three black spots joined together, a transverse band, composed of four united spots, placed before, another similar band below the middle, and a shorter one, abbreviated near the suture and ending in an elongate spot, as well as the sutural and lateral margin narrowly, black; under-side and legs violaceous; mesosternal process strong and curved.

Hab. : Colombia (my collection).

This species, of which I possess a single example, was obtained by the late Mr. Wallis in Colombia; it may be known from *D. Batesi*, Baly, by the fine punctuation of the thorax, which is not visible without a lens, the sides of the thorax are also more strongly rounded in the present species, and the last elytral band does not extend to the suture; *D. nigro-guttata*, Stål, has olive-green elytra, the bands are divided into isolated spots, and do not extend to the lateral margin; *D. proca* is similarly marked.

7, Hemstall Road, West Hampstead:
November, 1888.

IS *SPHECODES* PARASITIC?

BY R. C. L. PERKINS.

Some time ago, in this Magazine, I gave an account of the habits of the bees of the genus *Sphecodes*, Latr., and mentioned certain facts which favour the view that these bees are parasitic on *Halicti*. These facts were simply the result of my own observations in localities very rich in this genus, and I did not then attempt to discuss the arguments brought forward against the parasitic view; now, however, it seems advisable (as I have been able to make the acquaintance of one other rare species) to add a few further notes, and notice the chief observations which have caused the genus to be regarded as an industrial one.

When I began to collect *Hymenoptera* I was not a little surprised that the whole of the *leucozonius* group of *Halictus* appeared to be